

LUTZE SUPERFLEX® N PVC, Unshielded

High Flexing Control Cable with UL/CE Approvals



Application

- Suitable for control, monitoring and instrumentation applications with continuous flexing cycles
- For flexing applications such as C-tracks and other applications where linear flexing occurs
- Compatible with all major brand C-tracks
- High performance linear flexing cable, compliant with **NFPA 79, 2012 Edition** Article 12.9 special cables and conductors

Characteristics

- Extremely small cable ODs due to special **TPE High Glide Insulation** compliant with UL
- TPE/PVC combination for high performance flexing and longer cable runs
- Very flexible with superfine stranding
- Specially formulated PVC jacket per UL Class 43
- Non-wicking fillers
- Abrasion, high wear and tear resistance
- Hydrolysis, microbe and decompose resistant
- UV resistant per EN ISO 4892-2-A
- Dry and wet conditions
- Talc and Silicone free

Technical Data

Voltage	600V UL AWM
Test voltage	3000V
Insulation resistance	Min 100 MΩ x km
Temperature	Moving -5°C - +80°C Fixed -40°C - +80°C
Minimum Bending radius	Moving 7.5 x cable OD Fixed 4 x cable OD
Conductor marking	Black with white numbers and one green/yellow ground
Burning behavior	Flame retardant per UL VW-1, DIN EN 60332-1-2
Oil resistance	4D100C, UL Oil res 80°C and DIN EN 60811-404
Approvals	cUL AWM Style 20207 FT1 CE RoHS REACH

Construction

- Metric conductor
- Bare copper super finely stranded per DIN VDE 0295 Class 6 and IEC 60228 Class 6
- Special TPE conductor insulation
- G: with GNYE ground conductor
x: without ground conductor
- Optimized construction for flexing applications
- Conductors cabled with fleece wrap
- Special high strength PVC Jacket per UL class 43 / VDE 0207 TM5, oil resistant
- Gray jacket, similar to RAL 7001

Specifications are subject to change without prior notice

Part No.	Description No. of conductors incl. ground	OD / Ø ca. mm	OD / Ø inches	Weight Lbs/Mft	Copper Lbs/Mft
AWG 21 / 0.5 mm²					
A1382003	3G0.5	5.7	0.224	30	10
A1382004	4G0.5	6.1	0.240	36	13
A1382005	5G0.5	6.7	0.264	42	16
A1382007	7G0.5	7.7	0.303	53	23
A1382012	12G0.5	9.3	0.366	78	39
A1382018	18G0.5	10.7	0.421	109	59
A1382025	25G0.5	12.5	0.492	146	82
AWG 18 / 1.0 mm²					
A1381803	3G1.0	6.6	0.260	44	20
A1381804	4G1.0	7.2	0.283	54	27
A1381805	5G1.0	7.8	0.307	64	33
A1381807	7G1.0	9.1	0.358	83	46
A1381812	12G1.0	10.8	0.425	127	80
A1381818	18G1.0	12.7	0.500	179	120
A1381825	25G1.0	15.1	0.594	243	166
A1381834	34G1.0	17.8	0.701	318	226
A1381841	41G1.0	19.0	0.750	325	274
A1381850	50G1.0	21.3	0.839	332	335
AWG 16 / 1.5 mm²					
A1381603	3G1.5	7.2	0.283	58	30
A1381604	4G1.5	7.8	0.307	71	40
A1381605	5G1.5	8.6	0.339	84	49
A1381607	7G1.5	10.1	0.398	111	69
A1381612	12G1.5	12.4	0.488	173	119
A1381618	18G1.5	14.5	0.571	246	178
A1381625	25G1.5	16.8	0.661	336	231
AWG 14 / 2.5 mm²					
A1381404	4G2.5	9.1	0.358	107	65
A1381405	5G2.5	10.0	0.394	127	82
A1381407	7G2.5	12.1	0.476	170	115
AWG 12 / 4 mm²					
A1381204	4G4	10.7	0.421	154	105
A1381207	7G4	14.0	0.551	253	183

LUTZE Electronic PLTC PVC, Unshielded

Flexible Electronic Cable with UL/CE/PLTC Approvals



Application

- **Industrial grade PLTC** electronic cable for machine tools, process instrumentation and controls, computer peripherals, HVAC technology, assembly and production lines, low voltage interconnect and other industrial applications including **installation in cable trays**

Characteristics

- Flexible for easy installation
- Easy strip design
- Color coded conductors
- Specially formulated jacket for oil resistance
- Premium durability
- Extended temperature range
- **UL listed** and **NFPA 79** compliant
- Talc and Silicone free

Technical Data

Voltage	300V
Temperature	-40°C - +105°C
Minimum bending radius	4 x cable OD
Conductor marking	See tables
Burning behavior	Flame retardant per UL VW-1, FT4
Oil resistance	Oil Res II
Approvals	UL Type PLTC UL Type CM AWM Style 2464 AWM II A/B CE Meets NEC 725, 760, 800 Class I, II Div. 2 per NEC Art. 336, 392, 501, 502 (PLTC use only) RoHS REACH

Construction

- AWG conductor
- Flexible fine wire stranded tinned copper conductors
- SR-PVC insulation
- Oil resistant premium PVC jacket
- Gray jacket similar to RAL 7001

Specifications are subject to change without prior notice

Part No.	Description No. of conductors	OD / Ø ca. mm	OD / Ø inches	Weight Lbs/Mft	Copper Lbs/Mft
AWG 22 (19/34)					
A3032202	AWG22/2C	4.4	0.173	17	4
A3032203	AWG22/3C	4.6	0.181	21	7
A3032204	AWG22/4C	4.9	0.194	26	9
A3032206	AWG22/6C	5.7	0.223	33	14
A3032208	AWG22/8C	6.2	0.243	42	19
A3032210	AWG22/10C	7.2	0.283	53	24
A3032215	AWG22/15C	8.1	0.318	70	35
A3032220	AWG22/20C	9.0	0.353	90	47
A3032225	AWG22/25C	10.3	0.407	117	59

AWG 20 (19/32)					
A3032002	AWG20/2C	5.0	0.195	21	7
A3032003	AWG20/3C	5.2	0.204	27	11
A3032004	AWG20/4C	5.6	0.220	33	15
A3032006	AWG20/6C	6.5	0.254	45	22
A3032008	AWG20/8C	7.2	0.282	58	30
A3032010	AWG20/10C	8.2	0.323	72	37
A3032015	AWG20/15C	9.2	0.364	99	56
A3032020	AWG20/20C	10.7	0.420	134	75
A3032025	AWG20/25C	11.7	0.461	163	94

AWG 18 (19/30)					
A3031802	AWG18/2C	5.4	0.213	27	12
A3031803	AWG18/3C	5.7	0.223	35	18
A3031804	AWG18/4C	6.1	0.242	43	24
A3031806	AWG18/6C	7.4	0.291	63	36
A3031808	AWG18/8C	7.9	0.312	79	49
A3031810	AWG18/10C	9.1	0.359	97	61
A3031815	AWG18/15C	10.8	0.427	145	91
A3031820	AWG18/20C	11.9	0.468	185	121
A3031825	AWG18/25C	13.1	0.515	226	152

AWG16 (26/30)					
A3031602	AWG16/2C	6.5	0.257	36	16
A3031603	AWG16/3C	6.9	0.271	48	24
A3031604	AWG16/4C	7.7	0.304	62	32
A3031606	AWG16/6C	9.1	0.357	89	49
A3031608	AWG16/8C	10.3	0.407	119	65
A3031610	AWG16/10C	11.9	0.469	149	81
A3031615	AWG16/15C	13.5	0.532	207	122
A3031620	AWG16/20C	14.9	0.587	264	163
A3031625	AWG16/25C	17.0	0.669	336	204

Color Code Table AWG 22

1- BK	13- WH/RD
2- BN	14- WH/OG
3- RD	15- WH/YE
4- OG	16- WH/GN
5- YE	17- WH/BU
6- GN	18- WH/VT
7- BU	19- WH/GY
8- VT	20- WH/BK/BN
9- GY	21- WH/BK/RD
10- WH	22- WH/BK/OG
11- WH/BK	23- WH/BK/YE
12- WH/BN	24- WH/BK/GN
	25- WH/BK/BU

Color Code Table AWG 20, 18 & 16

1- BK	13- RD/GN
2- RD	14- RD/YE
3- WH	15- RD/BK
4- GN	16- WH/BK
5- OG	17- WH/RD
6- BU	18- WH/GN
7- BN	19- WH/YE
8- YE	20- WH/BU
9- VT	21- WH/BN
10- GY	22- WH/OG
11- PK	23- WH/GY
12- TN	24- WH/VT
	25- WH/BK/RD

LUTZE Technical Overview

Conductor Marking According to DIN 47100

No. Base/ring colors	No. Base/ring colors	No. Base/ring colors	No. Base/ring colors
1 white WH	16 yellow/brown	31 green/blue	46 brown
2 brown BN	17 white/grey	32 yellow/blue	47 green
3 green GN	18 grey/brown	33 green/red	48 yellow
4 yellow YE	19 white/pink	34 yellow/red	49 grey
5 grey GY	20 pink/brown	35 green/black	50 pink
6 pink PK	21 white/blue	36 yellow/black	51 blue
7 blue BU	22 brown/blue	37 grey/blue	52 red
8 red RD	23 white/red	38 pink/blue	53 black
9 black BK	24 brown/red	39 grey/red	54 violet
10 violet VT	25 white/black	40 pink/red	55 grey/pink
11 grey/pink	26 brown/black	41 grey/black	56 red/blue
12 red/blue	27 grey/green	42 pink/black	57 white/green
13 white/green	28 yellow/grey	43 blue/black	58 brown/green
14 brown/green	29 pink/green	44 red/black	59 white/yellow
15 white/yellow	30 yellow/pink	45 white	60 yellow/brown

Conductor Marking According to DIN 47100 for Twisted Pairs (TP)

Pair No. Conductor A & B	Pair No. Conductor A/B	Pair No. Conductor A/B	Pair No. Conductor A/B
1 white & brown	4 blue & red	7 white/green & brown/green	10 white/pink & pink/brown
2 green & yellow	5 black & violet	8 white/yellow & yellow/brown	11 white/blue & brown/blue
3 grey & pink	6 grey/pink & red/blue	9 white/grey & grey/brown	12 white/red & brown/red

Color Chart for Hook Up Wire

Color	Abbreviation	LÜTZE Color No.	RAL No.
Green/yellow	GN/YE	00	6018/1021
Black	BK	01	9005
Blue	BU	02	5015
Brown	BN	03	8003
Red	RD	04	3000
White	WH	05	9010
Gray	GY	06	7001
Purple (violet)	VT	07	4001
Pink	PK	08	3015
Orange	OG	09	2003
Yellow	YE	10	1021
Green	GN	11	6018
Dark blue	DBU	14	5010
Blue/white	BU/WH	15	5015/9010
White/blue	WH/BU	44	9010/5015
Red/White	RD/WH	45	3000/9010
Teal			5021

LUTZE Fittings Selection Chart

Part#	Plastic NPT	Plastic PG	Plastic Metric	Metal NPT	Metal PG	Metal Metric	Part#	Plastic NPT	Plastic PG	Plastic Metric	Metal NPT	Metal PG	Metal Metric
108380A	FPNPT38	FPPG11	FPM16	FMNPT12	FMPG11	FMM20	A1382003	FPNPT38	FPPG7	FPM12	FMNPT38	FMPG7	FMM16
108381A	FPNPT12-R	FPPG13	FPM20-R	FMNPT12	FMPG13	FMM20	A1382004	FPNPT38	FPPG9	FPM16	FMNPT38	FMPG9	FMM16
108382A	FPNPT12	FPPG13	FPM20	FMNPT12	FMPG13	FMM20	A1382005	FPNPT38	FPPG9	FPM16	FMNPT38	FMPG9	FMM16
108383A	FPNPT12	FPPG16	FPM20	FMNPT34	FMPG16	FMM25	A1382007	FPNPT38	FPPG11	FPM16	FMNPT12	FMPG11	FMM20
108384A	FPNPT34	FPPG21	FPM25	FMNPT34	FMPG21	FMM32	A1382012	FPNPT12-R	FPPG13	FPM20-R	FMNPT12	FMPG13	FMM20
108385A	FPNPT10	FPPG29	FPM32	FMNPT10	FMPG29	FMM40	A1382018	FPNPT12	FPPG16	FPM20	FMNPT12	FMPG16	FMM25
108386A	FPNPT10	FPPG29	FPM32	FMNPT10	FMPG29	FMM40	A1382025	FPNPT12	FPPG16	FPM20	FMNPT34	FMPG16	FMM25
108389A	FPNPT34	FPPG21	FPM25	FMNPT34	FMPG21	FMM32	A1391204	FPNPT12	FPPG16	FPM20	N/A	FMPG16	FMM25 FMM25-C2
108391A	FPNPT38	FPPG9	FPM16	FMNPT38	FMPG9	FMM16	A1391207	FPNPT34	FPPG21	FPM25	FMNPT34 FMNPT34-C2	FMPG21	FMM32 FMM25-C2
108392A	FPNPT12	FPPG16	FPM20	FMNPT12	FMPG16	FMM25	A1391404	FPNPT12	FPPG16	FPM20	FMNPT12 FMNPT12-C2	FMPG16	FMM25 FMM20-C2
108393A	FPNPT12	FPPG16	FPM20	FMNPT34	FMPG16	FMM25	A1391405	FPNPT12	FPPG16	FPM20	FMNPT12 FMNPT12-C2	FMPG16	FMM25 FMM25-C2
108401A	FPNPT38	FPPG9	FPM16	FMNPT38	FMPG9	FMM16	A1391407	FPNPT34	FPPG21	FPM25	FMNPT34 FMNPT34-C2	FMPG21	FMM32 FMM25-C2
A1060804	FPNPT10	FPPG29	FPM32	FMNPT10 FMNPT10-C2	FMPG29	FMM40 FMM40-C2	A1391603	FPNPT38	FPPG11	FPM16	FMNPT12 FMNPT12-C2	FMPG11	FMM20 FMM16-C2
A1061004	FPNPT34	FPPG21	FPM25	FMNPT34 FMNPT34-C2	FMPG21	FMM32 FMM32-C2	A1391604	FPNPT12-R	FPPG13	FPM20-R	FMNPT12 FMNPT12-C2	FMPG13	FMM20 FMM20-C2
A1061204	FPNPT12	FPPG16	FPM20	FMNPT34 FMNPT34-C2	FMPG16	FMM25 FMM25-C2	A1391605	FPNPT12-R	FPPG13	FPM20-R	FMNPT12 FMNPT12-C2	FMPG13	FMM20 FMM20-C2
A1061404	FPNPT12	FPPG16	FPM20	FMNPT12 FMNPT12-C2	FMPG16	FMM25 FMM25-C2	A1391607	FPNPT12	FPPG16	FPM20	FMNPT12 FMNPT12-C2	FMPG16	FMM25 FMM25-C2
A1061604	FPNPT12	FPPG13	FPM20	FMNPT12 FMNPT12-C2	FMPG13	FMM20 FMM20-C2	A1391612	FPNPT34	FPPG21	FPM25	FMNPT34 FMNPT34-C2	FMPG21	FMM32 FMM25-C2
A1061804	FPNPT12-R	FPPG13	FPM20	FMNPT12 FMNPT12-C2	FMPG13	FMM20 FMM20-C2	A1391618	FPNPT34	FPPG21	FPM25	FMNPT34 FMNPT34-C2	FMPG21	FMM32 FMM32-C2
A1070804	FPNPT10	FPPG36	FPM32	FMNPT10 FMNPT10-C2	FMPG36	FMM50 FMM40-C2	A1391625	FPNPT10	FPPG29	FPM32	FMNPT10 FMNPT10-C2	FMPG29	FMM40 FMM32-C2
A1071004	FPNPT10	FPPG29	FPM32	FMNPT10 FMNPT10-C2	FMPG29	FMM40 FMM32-C2	A1391803	FPNPT38	FPPG11	FPM16	FMNPT12 FMNPT12-C2	FMPG11	FMM20 FMM16-C2
A1071204	FPNPT34	FPPG21	FPM25	FMNPT34 FMNPT34-C2	FMPG21	FMM32 FMM32-C2	A1391804	FPNPT38	FPPG11	FPM16	FMNPT12 FMNPT12-C2	FMPG11	FMM20 FMM16-C2
A1071404	FPNPT34	FPPG21	FPM25	FMNPT34 FMNPT34-C2	FMPG21	FMM32 FMM25-C2	A1391805	FPNPT12-R	FPPG13	FPM20-R	FMNPT12 FMNPT12-C2	FMPG13	FMM20 FMM20-C2
A1071604	FPNPT34	FPPG21	FPM25	FMNPT34 FMNPT34-C2	FMPG21	FMM32 FMM25-C2	A1391807	FPNPT12	FPPG16	FPM20	FMNPT12 FMNPT12-C2	FMPG16	FMM25 FMM20-C2
A1071804	FPNPT12	FPPG16	FPM20	FMNPT34 FMNPT34-C2	FMPG16	FMM25 FMM25-C2	A1391812	FPNPT12	FPPG16	FPM20	FMNPT34 FMNPT34-C2	FMPG16	FMM25 FMM25-C2
A1381204	FPNPT12	FPPG13	FPM20	FMNPT12	FMPG13	FMM20	A1391818	FPNPT34	FPPG21	FPM25	FMNPT34 FMNPT34-C2	FMPG21	FMM32 FMM25-C2
A1381207	FPNPT34	FPPG21	FPM25	FMNPT34	FMPG21	FMM32	A1391825	FPNPT34	FPPG21	FPM25	FMNPT34 FMNPT34-C2	FMPG21	FMM32 FMM32-C2
A1381404	FPNPT38	FPPG13	FPM16	FMNPT12	FMPG13	FMM20	A1391834	FPNPT10	FPPG29	FPM32	FMNPT10 FMNPT10-C2	FMPG29	FMM40 FMM32-C2
A1381405	FPNPT12-R	FPPG13	FPM20-R	FMNPT12	FMPG13	FMM20	A1392003	FPNPT38	FPPG9	FPM16	FMNPT12 FMNPT38-C2	FMPG9	FMM20 FMM16-C2
A1381407	FPNPT12	FPPG16	FPM20	FMNPT12	FMPG16	FMM25	A1392004	FPNPT38	FPPG11	FPM16	FMNPT12 FMNPT38-C2	FMPG11	FMM20 FMM16-C2
A1381603	FPNPT38	FPPG9	FPM16	FMNPT12	FMPG9	FMM20	A1392005	FPNPT38	FPPG11	FPM16	FMNPT12 FMNPT12-C2	FMPG11	FMM20 FMM16-C2
A1381604	FPNPT38	FPPG11	FPM16	FMNPT12	FMPG11	FMM20	A1392007	FPNPT12-R	FPPG13	FPM20-R	FMNPT12 FMNPT12-C2	FMPG13	FMM20 FMM20-C2
A1381605	FPNPT38	FPPG11	FPM16	FMNPT12	FMPG11	FMM20	A1392012	FPNPT12	FPPG16	FPM20	FMNPT12 FMNPT12-C2	FMPG16	FMM25 FMM20-C2
A1381607	FPNPT12-R	FPPG13	FPM20-R	FMNPT12	FMPG13	FMM20	A1392018	FPNPT12	FPPG16	FPM20	FMNPT34 FMNPT34-C2	FMPG16	FMM25 FMM25-C2
A1381612	FPNPT12	FPPG16	FPM20	N/A	FMPG16	FMM25	A1392025	FPNPT34	FPPG21	FPM25	FMNPT34 FMNPT34-C2	FMPG21	FMM32 FMM25-C2
A1381618	FPNPT34	FPPG21	FPM25	FMNPT34	FMPG21	FMM32	A1410001	FPNPT12-R	FPPG13	FPM20-R	FMNPT12 FMNPT12-C2	FMPG13	FMM20 FMM20-C2
A1381625	FPNPT34	FPPG21	FPM25	FMNPT38	FMPG21	FMM32	A1410002	FPNPT12	FPPG16	FPM20	FMNPT12 FMNPT12-C2	FMPG16	FMM25 FMM25-C2
A1381803	FPNPT38	FPPG9	FPM16	FMNPT12	FMPG9	FMM16	A2160204	N/A	FPPG42	FPM50	N/A	FMPG42	FMM63 FMM50-C2
A1381804	FPNPT38	FPPG9	FPM16	FMNPT12	FMPG9	FMM20	A2160404	N/A	FPPG36	FPM40	N/A	FMPG36	FMM50 FMM50-C2
A1381805	FPNPT38	FPPG11	FPM16	FMNPT12	FMPG11	FMM20	A2160604	N/A	FPPG36	FPM40	N/A	FMPG36	FMM50 FMM40-C2
A1381807	FPNPT38	FPPG13	FPM16	FMNPT12	FMPG13	FMM20	A2160804	FPNPT10	FPPG29	FPM32	FMNPT10 FMNPT10-C2	FMPG29	FMM40 FMM40-C2
A1381812	FPNPT12	FPPG16	FPM20	FMNPT12	FMPG16	FMM25	A2161004	FPNPT10-R	FPPG29-R	FPM32-R	FMNPT34 FMNPT34-C2	FMPG21	FMM32 FMM32-C2
A1381818	FPNPT12	FPPG16	FPM20	FMNPT34	FMPG16	FMM25	A2161204	FPNPT34	FPPG21	FPM25	FMNPT34 FMNPT34-C2	FMPG21	FMM32 FMM25-C2
A1381825	FPNPT34	FPPG21	FPM25	FMNPT34	FMPG21	FMM32	A2161404	FPNPT34	FPPG21	FPM25	FMNPT34 FMNPT34-C2	FMPG21	FMM32 FMM25-C2
A1381834	FPNPT10-R	FPPG29-R	FPM32-R	FMNPT34	FMPG21	FMM32	A2161604	FPNPT12	FPPG16	FPM20	N/A	FMPG16	FMM25 FMM25-C2
A1381841	FPNPT10	FPPG29	FPM32	FMNPT10	FMPG29	FMM40	A2170204	N/A	FPPG42	FPM50	N/A	FMPG42	FMM63 FMM50-C2
A1381850	FPNPT10	FPPG29	FPM32	FMNPT10	FMPG29	FMM40	A2170404	N/A	FPPG36	FPM40	N/A	FMPG36	FMM50 FMM50-C2